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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/563,172 | 06/08/2007 | Frank J. Juskey | 102402-200 | 3747 |
| 27267 7590 04/02/2008 WIGGIN AND DANA LLP ATTENTION: PATENT DOCKETING ONE CENTURY TOWER, P.O. BOX 1832 NEW HAVEN, CT 06508-1832 | | | | |
| EXAMINER | | | | |
| CLARK, JASMINE JIHIAN B | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 2815 | | | | |
| MAIL DATE | | DELIVERY MODE | | |
| 04/02/2008 | | PAPER | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/563,172

Applicant(s)

JUSKEY ET AL.

Examiner

Jasmine J. Clark

Art Unit

2815

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-33 is/are allowed.
- 6) ☒ Claim(s) 1-5 and 11 is/are rejected.
- 7) ☒ Claim(s) 6-10 and 12 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 30 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____
- Paper No(s)/Mail Date 1/17/8

Information Disclosure Statement

1. The IDS filed 1/17/8 has been considered.

Specification

2. Claim 2 is objected to because of the following informalities: In claim 2, Applicants use "semiconductor die" and in claim 1 "semiconductor device". Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

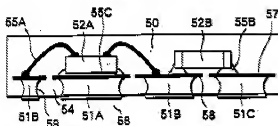
A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-5, and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Sakamoto et al. (US 2005/0056916 A1).

FIG.8



Sakamoto '916 discloses relating to a semiconductor package, comprising: a package body (50); a semiconductor device (52A) disposed within the package body (50); at least one passive component (52B) disposed within the package body (50); and a lead frame (51A-51C) formed from electrically material, the lead frame including a plurality of leads electrically connected to I/O pads on the semiconductor device (52A), and wherein the I/O pads of the semiconductor device (52A) are wire bonded (for claim 11), each of the leads including a first surface exposed from the package body for electrical connection to the external circuit, and a plurality of first interposers (57, i.e.,) electrically connected to the at least one passive device (52B), at least one interposer in the plurality of interposers being electrically connected to at least one lead in the plurality of leads for electrically connecting the at least one passive device (52B) with the external circuit; and wherein the package body is formed by a molding compound encapsulating at least a portion of the semiconductor device (52A), at least a portion of the at least one passive component, and at least a portion of the lead frame (claim 2).

To further clarify that the package body is a sealing resin and it is part of the molding compound.

Concerning claim 3, wherein the first surface of the leads are exposed substantially coplanar with a surface of the package body (50) (see Fig. 8 above).

Concerning claims 4 and 5, wherein the at least one passive device (52B) is selected from the group consisting of, for example capacitor, please see para [0165].

4. Claims 6-10, and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The applied reference fails to disclose and/or suggest the followings:

a) wherein a portion of the semiconductor device (52 A) is exposed from the package body (50) as set forth in claim 6;

b) wherein the I/O pads on the semiconductor device (52A) are soldered to bond sites on the lead frame for forming a flip chip attachment as set forth in claim 7. Claims 8-10 depend on claim 7.

c) including a support post in the plurality of the interposers, and wherein the support post is being exposed at a surface of the package body as set forth in claim 12.

5. Claims 13-33 are allowed.

The following is an examiner's statement of reasons for allowance: the applied reference fails to disclose and/or suggest, for example having: the plurality of first interposers each having a third surface coplanar with the first surface of the plurality

leads, at least a portion of each first interposer in the plurality of first interposers being spaced apart from the first package face.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Telephone Inquiry Contacts

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jasmine J. Clark whose telephone number is (571) 272-1726. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ken Parker can be reached on (571) 272-2298. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JC/3/28/8

/Jasmine J Clark/
Primary Examiner, Art Unit 2815